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Belousov, A. V.—Effect of a transverse magnetic field on acoustic relaxation in nematic liquid crystals —A. V. Belousov, A. P. Kapustin and A. S. Lagunov. **19**(6), 579 (May 1974); CPM-7405F0787

Ben’kovskii, V. G.—Laser sololuminescence in a liquid —A. G. Akmanov, V. G. Ben’kovskii, P. I. Golubnichii, S. I. Maslennikov and V. G. Shemanin. **19**(5), 417–8 (Mar. 1974); CPM-7403D0293

Bibikov, N. G.—Variation of the sensitivity to interruption of a sound signal in the adaptation of the frog auditory system —G. A. Bakhtin and N. G. Bibikov. **19**(4), 387–8 (Jan. 1974); CPM-7401D0467

Blagoi, Yu. P.—Excess ultrasonic absorption in classical monatomic liquids —Yu. P. Blagoi, B. G. Dudar’ and S. A. Mikhailenko. **19** (3), 284–5 (Nov. 1973); CPM-7312F0348

Blyumenkrants, D. L.—Choosing the Optimum Dimensions of Concentrators for Low–Power Ultrasonic Machine Tools —D. L. Blyumenkrants and Z. I. Polyakov. **19**(1), 6–10 (Jul. 1973); CPM-7307E0594

Bogdanov, S. V.—Efficiency modulation of a thin–film transducer for the excitation of surface waves —S. V. Bogdanov and I. B. Yakovkin. **19**(5), 491–2 (Mar. 1974); CPM-7403D0367

Bogorodskii, V. V.—Attenuation of Sound in Ice in the Frequency Range 200–1100 kHz —V. V. Bogorodskii and A. V. Gusev. **19**(2), 97–100 (Sep. 1973); CPM-7309D0145

—Internal friction of ice —V. V. Bogorodskii, V. P. Gavrilo and V. S. Grigor’ev. **19**(4), 305–11 (Jan. 1974); CPM-7401D0385

Borisov, Yu. Ya.—Elliptical sound focusing elements —Yu. Ya. Borisov and N. M. Gynkina. **19**(4), 389–91 (Jan. 1974); CPM-7401D0469

—Acoustic streaming as one of the factors responsible for the influence of sound on a laminar flame jet —Yu. Ya. Borisov, A. F. Kiyan and É. I. Rozenfel’d. **19**(6), 580–1 (May 1974); CPM-7405F0788

Braginskaya, F. I.—Ultrasonic investigation of the hydrolysis of a biopolymer (RNA) —F. I. Braginskaya. **19**(3), 286–7 (Nov. 1973); CPM-7312F0350

Brazhnikova, L. N.—Method for Investigation of Diffraction by a Circular Disk —L. N. Brazhnikova and V. G. Sologub. **19**(2), 183–4 (Sep. 1973); CPM-7309D0231

Budtov, V. P.—Relaxation properties of dilute solutions of polymers with chain molecules having different thermodynamic rigidities —V. P. Budtov, Yu. L. Vagin and S. N. Pen’kov. **19**(6), 519–22 (May 1974); CPM-7405F0727

Bunkin, F. V.—Optical excitation of sound waves —F. V. Bunkin and V. M. Komissarov. **19**(3), 203–11 (Nov. 1973); CPM-7312F0267

Burundukov, K. M.—Experimental study of the diffraction corrections to the velocity of ultrasound in liquids —K. M. Burundukov and A. M. Lobanov. **19**(5), 493–4 (Mar. 1974); CPM-7403D0369

Butyrskii, L. S.—Structural variations of speech produced in a helium–oxygen medium —L. S. Butyrskii and B. I. Petlenko. **19**(5), 419–24 (Mar. 1974); CPM-7403D0295

C

Chaban, A. A.—Acoustoelectric Interaction in Inhomogeneous Piezoelectric Semiconductors —M. M. Vorontsova and A. A. Chaban. **19**(1), 14–7 (Jul. 1973); CPM-7307E0602

—Opticoacoustic interaction in photoconwucting piezoelectrics —A. A. Chaban. **19**(3), 298–9 (Nov. 1973); CPM-7312F0362

Chaban, I. A.—Spatial dispersion of the velocity of sound in emulsions —I. A. Chaban. **19**(6), 600–1 (May 1974); CPM-7405F0808

Chalyi, A. V.—Altitude dependence of the sound velocity near the liquid–vapor critical point —A. D. Alekhin and A. V. Chalyi. **19** (5), 489–90 (Mar. 1974); CPM-7403D0365

Charnaya, E. V.—Dynamic quadrupole interaction operator in a nonionic crystal field model —A. R. Kessel’ and E. V. Charnaya. **19**(4), 348–50 (Jan. 1974); CPM-7401D0428

Chechetkina, E. M.—Calculation of the Sound Pressure Field for Plane Wave Diffraction at the End of a Cylinder —E. M. Chechetkina. **19**(2), 175–7 (Sep. 1973); CPM-7309D0223

Chekhunova, N. P.—Piezoelectric elements made from antimony sulfoiodide crystals —A. A. Grekov, S. P. Danilova, P. L. Zaks, V. V. Kulieva, L. A. Rubanov, L. N. Syrkin, N. P. Chekhunova and A. M. Él’gard. **19**(4), 393–4 (Jan. 1974); CPM-7401D0473

Chernyshev, K. V.—Matching of a Linear Electroacoustic Transducer with the Signal Generator and Load —K. V. Chernyshev. **19**(2), 173–4 (Sep. 1973); CPM-7309D0221

—Resonance properties of certain types of inhomogeneous acoustic waveguides —A. V. Egor’ichev, A. S. Prudnikov and K. V. Chernyshev. **19**(3), 230–3 (Nov. 1973); CPM-7312F0294

Chistovich, L. A.—Experimental testing of the band hypothesis of vowel perception —V. N. Mushnikov and L. A. Chistovich. **19**(3), 250–4 (Nov. 1973); CPM-7312F0314

—Phoneme boundary fluctuations —V. N. Mushnikov and L. A. Chistovich. **19**(4), 362–6 (Jan. 1974); CPM-7401D0442

Chitavichyus, A. B.—Automatic recognition of words in a finite set by their structural connections with implicit time —R. V. Gudonavichyus, A. M. Zaezdnyi and A. B. Chitavichyus. **19**(6), 529–32 (May 1974); CPM-7405F0737

Chudinov, A. A.—Calculation of the directions of zero temperature coefficient of the signal delay time in a quartz single crystal —A. A. Chudinov. **19**(4), 379–82 (Jan. 1974); CPM-7401D0459
Chuklov, V. A.—Amplitude and phase fluctuations in a spherical wave —V. N. Karavainikov and V. A. Chuklov. **19**(6), 539–41 (May 1974); CPM-7405F0747
Chuprov, S. D.—Spatial and frequency correlation of the amplitude fluctuations of sound signals reflected from the ocean surface —V. I. Neklyudov and S. D. Chuprov. **19**(3), 255–9 (Nov. 1973); CPM-7312F0319

D

Danilova, S. P.—Piezoelectric elements made from antimony sulfoiodide crystals —A. A. Grekov, S. P. Danilova, P. L. Zaks, V. V. Kulieva, L. A. Rubanov, L. N. Syrkin, N. P. Chekhunova and A. M. Él'gard. **19**(4), 393–4 (Jan. 1974); CPM-7401D0473
Darinskii, A. A.—Absorption of longitudinal ultrasonic waves in polymer solutions at high frequencies —Yu. Ya. Gotlib and A. A. Darinskii. **19**(5), 430–3 (Mar. 1974); CPM-7403D0306
Davidovich, L. A.—Vibrational Relaxation Mechanism in Liquids —L. A. Davidovich, A. A. Ivanov, S. Makhkamov, L. Pulatova, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(1), 18–21 (Jul. 1973); CPM-7307E0606
—Ultra- and hypersonic properties of triethylamine—water solutions having a low critical segregation point —L. A. Davidovich, B. Izbasarov, P. K. Khabibullaev and M. G. Khaliulin. **19**(3), 292 (Nov. 1973); CPM-7312F0356
—Sound propagation in nitrobenzene–heptane solutions having a critical segregation point —L. A. Davidovich, P. K. Khabibullaev and M. G. Khaliulin. **19**(6), 584–5 (May 1974); CPM-7405F0792
Demidov, V. P.—Longitudinal wave attenuation in textured cadmium sulfide thin films —V. P. Demidov and A. A. Smirnov. **19**(3), 223–5 (Nov. 1973); CPM-7312F0287
Dianov, D. B.—Frequency response curves of cylindrical transducers containing a transition layer and a filler core —D. B. Dianov and A. G. Kuz'menko. **19**(4), 339–41 (Jan. 1974); CPM-7401D0419
Dianov, L. B.—Frequency response and directivity characteristics of a cylindrical transducer in a compliant baffle —L. B. Dianov, I. M. Zadirienko and A. G. Kuz'menko. **19**(5), 434–8 (Mar. 1974); CPM-7403D0310
Dobrovol'skii, Yu. Yu.—Sound field of a spherical radiator —Yu. Yu. Dobrovol'skii. **19**(5), 439–41 (Mar. 1974); CPM-7403D0315
Dudar', B. G.—Excess ultrasonic absorption in classical monatomic liquids —Yu. P. Blagoi, B. G. Dudar' and S. A. Mikhailenko. **19**(3), 284–5 (Nov. 1973); CPM-7312F0348

E

Egor'ichev, A. V.—Resonance properties of certain types of inhomogeneous acoustic waveguides —A. V. Egor'ichev, A. S. Prudnikov and K. V. Chernyshev. **19**(3), 230–3 (Nov. 1973); CPM-7312F0294
Élektrova, L. M.—Use of a quarter-wave vibrator to measure the dynamic characteristics of polymers in the audio-frequency range —Yu. V. Zelenev, P. V. Melent'ev and L. M. Élektrova. **19**(5), 497–8 (Mar. 1974); CPM-7403D0373
Él'gard, A. M.—Piezoelectric elements made from antimony sulfoiodide crystals —A. A. Grekov, S. P. Danilova, P. L. Zaks, V. V. Kulieva, L. A. Rubanov, L. N. Syrkin, N. P. Chekhunova and A. M. Él'gard. **19**(4), 393–4 (Jan. 1974); CPM-7401D0473
Eliseevnin, V. A.—Longitudinal frequency correlation of fluctuations of the parameters of plane waves propagating in a turbulent medium —V. A. Eliseevnin. **19**(6), 533–8 (May 1974); CPM-7405F0741
Épshtein, É. M.—Amplification of Ultrasound in the Photoconducting Piezoelectric Semiconductor Under Modulation Illumination Conditions —D. V. Galchenkov and É. M. Épshtein. **19**(2), 185–6 (Sep. 1973); CPM-7309D0233
Esipov, I. B.—Collapse of a Bubble in a Compressible Liquid —I. B. Esipov and K. A. Naugol'nykh. **19**(2), 187–8 (Sep. 1973); CPM-7309D0235
Evseev, V. N.—Sound radiation from an infinite plate with periodic inhomogeneities —V. N. Evseev. **19**(3), 226–9 (Nov. 1973); CPM-7312F0290

F

Fain, V. S.—Feasibility of correlating a phonetic speech code with the acoustic speech signal —V. S. Fain. **19**(3), 276–8 (Nov. 1973); CPM-7312F0340
Fedorchenko, A. M.—Analysis of the self-excitaton conditions for an acoustic oscillator as a function of the type of boundary conditions —N. M. Goncharuk, P. Ya. Kotsarenko and A. M. Fedorchenko. **19**(3), 290–1 (Nov. 1973); CPM-7312F0354
Fedorov, V. A.—Operation of a Piezoelectric Transducer into an Elastically Anisotropic Solid Medium —L. G. Merkulov, V. A. Fedorov and L. A. Yakovlev. **19**(1), 36–40 (Jul. 1973); CPM-7307E0624
Fedoruk, T. Ya.—Choosing the Optimum Conditions for the Acoustic Coagulation of Aerosols —V. A. Belen'kii, V. I. Timoshenko and T. Ya. Fedoruk. **19**(2), 181–2 (Sep. 1973); CPM-7309D0229
Fedotov, G. A.—Application of Ultrasound for the Evacuation of Vacuum Electronic Equipment —G. A. Ostroumov and G. A. Fedotov. **19**(1), 51–3 (Jul. 1973); CPM-7307E0639

G

Galanenko, V. B.—Measurement of the Probabilistic Characteristics of Random Sound Fields —V. B. Galanenko, M. I. Karnovskii and L. G. Krasnyi. **19**(2), 103–5 (Sep. 1973); CPM-7309D0151
Galchenkov, D. V.—Amplification of Ultrasound in the Photoconducting Piezoelectric Semiconductor Under Modulation Illumination Conditions —D. V. Galchenkov and É. M. Épshtein. **19**(2), 185–6 (Sep. 1973); CPM-7309D0233
Ganeva, L. I.—Mechanical load impedance in the ultrasonic cutting of brittle materials —L. I. Ganeva, I. P. Golyamina and V. S. Margolin. **19**(4), 335–8 (Jan. 1974); CPM-7401D0415
Gavrikov, V. K.—Stimulated scattering of sound at the surface of a liquid —V. K. Gavrikov and N. V. Lukashova. **19**(4), 328–31 (Jan. 1974); CPM-7401D0408
—Stimulated sound scattering at a liquid interface under surface resonance conditions —V. K. Gavrikov and A. V. Kats. **19**(5), 425–9 (Mar. 1974); CPM-7403D0301
Gavrilo, V. P.—Internal friction of ice —V. V. Bogorodskii, V. P. Gavrilo and V. S. Grigor'ev. **19**(4), 305–11 (Jan. 1974); CPM-7401D0385
Gavrilov, L. R.—Stimulation of human peripheral neural structures by focused ultrasound —L. R. Gavrilov, G. V. Gershuni, O. B. Il'inskii, L. A. Popova, M. G. Sirotyuk and E. M. Tsirul'nikov. **19**(4), 332–4 (Jan. 1974); CPM-7401D0412
Gershuni, G. V.—Stimulation of human peripheral neural structures by focused ultrasound —L. R. Gavrilov, G. V. Gershuni, O. B. Il'inskii, L. A. Popova, M. G. Sirotyuk and E. M. Tsirul'nikov. **19**(4), 332–4 (Jan. 1974); CPM-7401D0412
Gits, I. D.—Estimating the Third-Order Elastic Constants of Solids from the Modulation of Sound by Sound —I. D. Gits and B. A. Konyukhov. **19**(2), 106–9 (Sep. 1973); CPM-7309D0154
—Variation of the nonlinear distortions of sound waves in polycrystalline aluminum during fatigue tests —I. D. Gits, V. V. Gushchin and B. A. Konyukhov. **19**(3), 221–2 (Nov. 1973); CPM-7312F0285
Godovikov, A. A.—Elastic and photoelastic properties of proustite —A. A. Godovikov, I. I. Zubrinov, V. I. Semenov and D. V. Sheloput. **19**(6), 582–3 (May 1974); CPM-7405F0790
Golovchan, V. T.—Wave Diffraction by Spherical Cavities in a Layer —V. T. Golovchan. **19**(2), 110–3 (Sep. 1973); CPM-7309D0158
Golub, P. D.—Velocity of ultrasound and molecular motion in polymethylmethacrylate in the temperature interval 2.1–240°K —P. D. Golub and I. I. Perepechko. **19**(4), 391–2 (Jan. 1974); CPM-7401D0471
Golubnichii, P. I.—Laser sololuminescence in a liquid —A. G. Akmanov, V. G. Ben'kovskii, P. I. Golubnichii, S. I. Maslennikov and V. G. Shemanin. **19**(5), 417–8 (Mar. 1974); CPM-7403D0293
Golyamina, I. P.—Mechanical load impedance in the ultrasonic cutting of brittle materials —L. I. Ganeva, I. P. Golyamina and V. S. Margolin. **19**(4), 335–8 (Jan. 1974); CPM-7401D0415
Goncharuk, N. M.—Analysis of the self-excitaton conditions for an acoustic oscillator as a function of the type of boundary conditions —N. M. Goncharuk, P. Ya. Kotsarenko and A. M. Fedorchenko. **19**(3), 290–1 (Nov. 1973); CPM-7312F0354
Gorskaya, N. V.—Experimental study of the sound field in an inhomogeneous surface channel —N. V. Gorskaya. **19**(6), 526–8 (May 1974); CPM-7405F0734

Gotlib, Yu. Ya.—Absorption of longitudinal ultrasonic waves in polymer solutions at high frequencies —Yu. Ya. Gotlib and A. A. Darinskii. **19**(5), 430–3 (Mar. 1974); CPM-7403D0306

Grebinnik, V. G.—Formation of ionizing–particle tracks in an ultrasonic field in a liquid–hydrogen bubble chamber —V. A. Akulichev, V. G. Grebinnik, V. A. Zhukov, V. A. Krasil'nikov, A. P. Manych and G. I. Selivanov. **19**(4), 312–7 (Jan. 1974); CPM-7401D0392

Grekov, A. A.—Piezoelectric elements made from antimony sulfoiodide crystals —A. A. Grekov, S. P. Danilova, P. L. Zaks, V. V. Kulieva, L. A. Rubanov, L. N. Syrkin, N. P. Chekhunova and A. M. Él'gard. **19**(4), 393–4 (Jan. 1974); CPM-7401D0473

Grigor'ev, V. S.—Internal friction of ice —V. V. Bogorodskii, V. P. Gavrilo and V. S. Grigor'ev. **19**(4), 305–11 (Jan. 1974); CPM-7401D0385

Grischenko, E. K.—Losses and Frequency Characteristics of Piezoelectric Receiving Transducers —E. K. Grischenko. **19**(2), 114–7 (Sep. 1973); CPM-7309D0162

Gudonavichyus, R. V.—Automatic recognition of words in a finite set by their structural connections with implicit time —R. V. Gudonavichyus, A. M. Zaezdnyi and A. B. Chitavichyus. **19**(6), 529–32 (May 1974); CPM-7405F0737

Gulina, M. A.—Sound Field in a Surface Underwater Channel Having a Rough Boundary —M. A. Gulina. **19**(1), 68–9 (Jul. 1973); CPM-7307E0656

Gusev, A. V.—Attenuation of Sound in Ice in the Frequency Range 200–1100 kHz —V. V. Bogorodskii and A. V. Gusev. **19**(2), 97–100 (Sep. 1973); CPM-7309D0145

Gushchin, V. V.—Variation of the nonlinear distortions of sound waves in polycrystalline aluminum during fatigue tests —I. D. Gits, V. V. Gushchin and B. A. Konyukhov. **19**(3), 221–2 (Nov. 1973); CPM-7312F0285

Gynkina, N. M.—Elliptical sound focusing elements —Yu. Ya. Borisov and N. M. Gynkina. **19**(4), 389–91 (Jan. 1974); CPM-7401D0469

I

Il'inskii, O. B.—Stimulation of human peripheral neural structures by focused ultrasound —L. R. Gavrilov, G. V. Gershuni, O. B. Il'inskii, L. A. Popova, M. G. Sirotyuk and E. M. Tsirul'nikov. **19** (4), 332–4 (Jan. 1974); CPM-7401D0412

Ivanov, A. A.—Vibrational Relaxation Mechanism in Liquids —L. A. Davidovich, A. A. Ivanov, S. Makhkamov, L. Pulatova, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(1), 18–21 (Jul. 1973); CPM-7307E0606

—Acoustical properties of acetic acid–pyridine solutions —A. A. Ivanov, S. Makhkamov, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(6), 588–9 (May 1974); CPM-7405F0796

Ivanov, I. D.—Reflection and Refraction of a Plane Pulse at an Interface between Liquid Media —I. D. Ivanov. **19**(1), 73–5 (Jul. 1973); CPM-7307E0661

—Reflection of a spherical pulse from a fluid–fluid interface —I. D. Ivanov. **19**(4), 342–4 (Jan. 1974); CPM-7401D0422

Ivanov, V. P.—Formation of a Plane Wave by an Active Grating in the Presence of a Baffle —V. P. Ivanov. **19**(1), 70–2 (Jul. 1973); CPM-7307E0658

Izbasarov, B.—Ultra– and hypersonic properties of triethylamine—water solutions having a low critical segregation point —L. A. Davidovich, B. Izbasarov, P. K. Khabibullaev and M. G. Khaliulin. **19**(3), 292 (Nov. 1973); CPM-7312F0356

K

Kanevskii, I. N.—Calculation of the Sound Field in the Focal Region of a Closed Homogeneous Cylindrical Lens —I. N. Kanevskii and B. S. Surikov. **19**(1), 28–31 (Jul. 1973); CPM-7307E0616

—Position of the focus of a closed homogeneous lens —I. N. Kanevskii and B. S. Surikov. **19**(4), 345–7 (Jan. 1974); CPM-7401D0425

Kapustin, A. P.—Effect of a transverse magnetic field on acoustic relaxation in nematic liquid crystals —A. V. Belousov, A. P. Kapustin and A. S. Lagunov. **19**(6), 579 (May 1974); CPM-7405F0787

Kapustina, O. A.—Visualization of ultrasonic surface waves by means of liquid crystals —O. A. Kapustina and A. A. Talashev. **19**(4), 397–8 (Jan. 1974); CPM-7401D0477

Karavainikov, V. N.—Amplitude and phase fluctuations in a spherical wave —V. N. Karavainikov and V. A. Chuklov. **19**(6), 539–41 (May 1974); CPM-7405F0747

Karnovskii, M. I.—Measurement of the Probabilistic Characteristics of Random Sound Fields —V. B. Galanenko, M. I. Karnovskii and L. G. Krasnyi. **19**(2), 103–5 (Sep. 1973); CPM-7309D0151

Kats, A. V.—Stimulated sound scattering at a liquid interface under surface resonance conditions —V. K. Gavrikov and A. V. Kats. **19** (5), 425–9 (Mar. 1974); CPM-7403D0301

Kessel', A. R.—Dynamic quadrupole interaction operator in a nonionic crystal field model —A. R. Kessel' and E. V. Charnaya. **19**(4), 348–50 (Jan. 1974); CPM-7401D0428

Khabibullaev, P. K.—Vibrational Relaxation Mechanism in Liquids —L. A. Davidovich, A. A. Ivanov, S. Makhkamov, L. Pulatova, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(1), 18–21 (Jul. 1973); CPM-7307E0606

—Ultra– and hypersonic properties of triethylamine—water solutions having a low critical segregation point —L. A. Davidovich, B. Izbasarov, P. K. Khabibullaev and M. G. Khaliulin. **19**(3), 292 (Nov. 1973); CPM-7312F0356

—Acoustic relaxation in the binary system normal butanol–ternary butanol —V. S. Sperkach, P. K. Khabibullaev and M. I. Shakhparonov. **19**(4), 405–6 (Jan. 1974); CPM-7401D0485

—Ultra– and hypersonic properties of octyl and nonyl alcohols —L. E. Kvasova, L. Pulatova, L. A. Rasulmukhamedova and P. K. Khabibullaev. **19**(5), 445–6 (Mar. 1974); CPM-7403D0321

—Sound propagation in nitrobenzene–heptane solutions having a critical segregation point —L. A. Davidovich, P. K. Khabibullaev and M. G. Khaliulin. **19**(6), 584–5 (May 1974); CPM-7405F0792

—Acoustical properties of acetic acid–pyridine solutions —A. A. Ivanov, S. Makhkamov, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(6), 588–9 (May 1974); CPM-7405F0796

Khaliulin, M. G.—Vibrational Relaxation Mechanism in Liquids —L. A. Davidovich, A. A. Ivanov, S. Makhkamov, L. Pulatova, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(1), 18–21 (Jul. 1973); CPM-7307E0606

—Ultra– and hypersonic properties of triethylamine—water solutions having a low critical segregation point —L. A. Davidovich, B. Izbasarov, P. K. Khabibullaev and M. G. Khaliulin. **19**(3), 292 (Nov. 1973); CPM-7312F0356

—Sound propagation in nitrobenzene–heptane solutions having a critical segregation point —L. A. Davidovich, P. K. Khabibullaev and M. G. Khaliulin. **19**(6), 584–5 (May 1974); CPM-7405F0792

—Acoustical properties of acetic acid–pyridine solutions —A. A. Ivanov, S. Makhkamov, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(6), 588–9 (May 1974); CPM-7405F0796

Kheifets, E. I.—Erratum: Formation of Caustics in the Interaction of Sound with Shells [**18**, 381 (1973,3)] —E. I. Kheifets and E. L. Shenderov. **19**(1), 91 (Jul. 1973); CPM-7307E0679

—Quantitative Analysis of Sound Fields Visualized by the Shadow–Optical Method —E. P. Smirnov, E. I. Kheifets and E. L. Shenderov. **19**(2), 159–64 (Sep. 1973); CPM-7309D0207

—Quantitative analysis of sound field visualized by holographic techniques —E. I. Kheifets. **19**(3), 279–83 (Nov. 1973); CPM-7312F0343

Khokhlov, R. V.—Confinement of a quasiplane beam of periodic perturbations in a nonlinear medium —O. V. Rudenko, S. I. Soluyan and R. V. Khokhlov. **19**(6), 556–9 (May 1974); CPM-7405F0764

Kirshov, V. A.—Directivity characteristics of a point source situated at the vertex of a divergent channel in a fresh–water reservoir —L. N. Zakharov, V. A. Kirshov, A. K. Matveev and V. V. Naumova. **19**(6), 586–7 (May 1974); CPM-7405F0794

Kiyan, A. F.—Acoustic streaming as one of the factors responsible for the influence of sound on a laminar flame jet —Yu. Ya. Borisov, A. F. Kiyan and É. I. Rozenfel'd. **19**(6), 580–1 (May 1974); CPM-7405F0788

Kleshchev, A. A.—Erratum: Synthesis of an Acoustic Array Having a Curvilinear (Spheroidal) Surface over a Wide Range of Wave Dimensions [**18**, 347 (1973)] —A. A. Kleshchev. **19**(2), 201 (Sep. 1973); CPM-7309D0249

—Scatterer in the field of a point source —A. A. Kleshchev. **19**(3), 293–4 (Nov. 1973); CPM-7312F0357

—Sound scattering by ideal spheroids in the high–frequency limit —A. A. Kleshchev. **19**(5), 447–9 (Mar. 1974); CPM-7403D0323

Klyachkin, V. I.—Spatial correlation functions in the gap between a thin plate and a baffle having a local impedance —V. I. Klyachkin and R. A. Sokolova. **19**(5), 450–4 (Mar. 1974); CPM-7403D0326

Kol'tsova, I. S.—Attenuation of ultrasound in emulsions —I. S. Kol'tsova, I. G. Mikhailov and B. Saburov. **19**(5), 455–8 (Mar. 1974); CPM-7403D0331

Komissarov, V. M.—Optical excitation of sound waves —F. V. Bunkin and V. M. Komissarov. **19**(3), 203–11 (Nov. 1973); CPM-7312F0267

Komissarova, N. N.—Average Decay Law for a Sound Field in a Wedge —N. N. Komissarova. **19**(2), 123–5 (Sep. 1973); CPM-7309D0171

—Reply to V. K. Kuznetsov's Letter to the Editor —N. N. Komissarova. **19**(2), 200 (Sep. 1973); CPM-7309D0248

—Field of a point source in a divergent domain modeling the conditions of underwater sound propagation in a coastal zone —N. N. Komissarova. **19**(4), 351–5 (Jan. 1974); CPM-7401D0431

Kondrat'ev, V. I.—Sound propagation in variable–section ducts carrying a compressible gas flow —V. I. Kondrat'ev, V. M. Mamin and L. S. Pykhov. **19**(6), 542–5 (May 1974); CPM-7405F0750

Konyukhov, B. A.—Estimating the Third–Order Elastic Constants of Solids from the Modulation of Sound by Sound —I. D. Gits and B. A. Konyukhov. **19**(2), 106–9 (Sep. 1973); CPM-7309D0154

—Variation of the nonlinear distortions of sound waves in polycrystalline aluminum during fatigue tests —I. D. Gits, V. V. Gushchin and B. A. Konyukhov. **19**(3), 221–2 (Nov. 1973); CPM-7312F0285

Korovkin, A. N.—Sound diffraction by a baffle coupled with an elastic plate —A. N. Korovkin and D. D. Plakhov. **19**(5), 459–62 (Mar. 1974); CPM-7403D0335

Kotsarenko, P. Ya.—Analysis of the self–excitaton conditions for an acoustic oscillator as a function of the type of boundary conditions —N. M. Goncharuk, P. Ya. Kotsarenko and A. M. Fedorchenko. **19**(3), 290–1 (Nov. 1973); CPM-7312F0354

Kovinskaya, S. I.—Flexural Wave Fields in Infinite Beam–Reinforced Plates under Point Excitation —S. I. Kovinskaya and A. S. Nikiforov. **19**(1), 32–5 (Jul. 1973); CPM-7307E0620

Kozhelupova, N. G.—Study of Underwater Noise Distributions in Inland Sea and Ocean Coastal Regions —V. I. Bardyshev, N. G. Kozhelupova and V. I. Kryshnii. **19**(2), 95–6 (Sep. 1973); CPM-7309D0143

Kozlenko, N. I.—Articulation characteristics of extremally coded speech —N. I. Kozlenko and R. N. Ryzhkova. **19**(3), 238–40 (Nov. 1973); CPM-7312F0302

Krasil'nikov, V. A.—Formation of ionizing–particle tracks in an ultrasonic field in a liquid–hydrogen bubble chamber —V. A. Akulichev, V. G. Grebinnik, V. A. Zhukov, V. A. Krasil'nikov, A. P. Manych and G. I. Selivanov. **19**(4), 312–7 (Jan. 1974); CPM-7401D0392

—Nonlinear interaction of elastic waves in crystals and signal data processing —V. A. Krasil'nikov and V. E. Lyamov. **19**(5), 516–8 (Mar. 1974); CPM-7403D0392

Krasnoborod'ko, V. V.—Correlation of sound signals reflected from the ocean bottom with variation of the transmission frequency —V. I. Volovov, V. V. Krasnoborod'ko and Yu. P. Lysanov. **19**(3), 216–20 (Nov. 1973); CPM-7312F0280

Krasnyi, L. G.—Measurement of the Probabilistic Characteristics of Random Sound Fields —V. B. Galanenko, M. I. Karnovskii and L. G. Krasnyi. **19**(2), 103–5 (Sep. 1973); CPM-7309D0151

Krichevskaya, O. P.—The Quasichemical and Fluctuation Mechanisms of Relaxation in Mixtures —O. P. Krichevskaya, V. P. Romanov and V. A. Solov'ev. **19**(2), 126–9 (Sep. 1973); CPM-7309D0174

Krovyakov, A. P.—Calculation of the elements of the vibratory system of an audio–frequency electromechanical filter —A. P. Krovyakov. **19**(6), 590–1 (May 1974); CPM-7405F0798

Kruus, P.—Ultrasonic Absorption in the t–Butyl Alcohol–Water System —P. Kruus, L. K. Kudryashova, I. G. Mikhailov and V. P. Romanov. **19**(1), 82–3 (Jul. 1973); CPM-7307E0670

Kryshnii, V. I.—Study of Underwater Noise Distributions in Inland Sea and Ocean Coastal Regions —V. I. Bardyshev, N. G. Kozhelupova and V. I. Kryshnii. **19**(2), 95–6 (Sep. 1973); CPM-7309D0143

Kudryashova, L. K.—Ultrasonic Absorption in the t–Butyl Alcohol–Water System —P. Kruus, L. K. Kudryashova, I. G. Mikhailov and V. P. Romanov. **19**(1), 82–3 (Jul. 1973); CPM-7307E0670

Kulakova, L. A.—Influence of the Transducer and Bond on the Measured Sound Absorption in Crystals —L. A. Kulakova. **19**(2), 189–90 (Sep. 1973); CPM-7309D0237

Kul'bitskaya, M. N.—Anomaly of the temperature dependence of the sound velocity in glasses —M. N. Kul'bitskaya, V. P. Romanov and V. A. Shutilov. **19**(4), 399–400 (Jan. 1974); CPM-7401D0479

Kulieva, V. V.—Piezoelectric elements made from antimony sulfoiodide crystals —A. A. Grekov, S. P. Danilova, P. L. Zaks, V. V. Kulieva, L. A. Rubanov, L. N. Syrkin, N. P. Chekhunova and A. M. Él'gard. **19**(4), 393–4 (Jan. 1974); CPM-7401D0473

Kuz'menko, A. G.—Frequency response curves of cylindrical transducers containing a transition layer and a filler core —D. B. Dianov and A. G. Kuz'menko. **19**(4), 339–41 (Jan. 1974); CPM-7401D0419

—Frequency response and directivity characteristics of a cylindrical transducer in a compliant baffle —L. B. Dianov, I. M. Zadirienko and A. G. Kuz'menko. **19**(5), 434–8 (Mar. 1974); CPM-7403D0310

Kuznetsov, G. N.—Instantaneous parameters of the motion of a cavitation bubble in an inhomogeneous sound field —É. M. Agrest and G. N. Kuznetsov. **19**(3), 212–5 (Nov. 1973); CPM-7312F0276

—Effect of viscosity on the dynamics of a collapsing bubble executing translational motion —G. N. Kuznetsov and I. E. Shchekin. **19**(5), 463–7 (Mar. 1974); CPM-7403D0339

Kuznetsov, V. K.—Effect of a Corrugated Surface of a Waveguide Layer on the Directionality of Radiation from a Point Source in the Waveguide Plane —V. K. Kuznetsov. **19**(2), 130–4 (Sep. 1973); CPM-7309D0178

—Letter to the Editor —V. K. Kuznetsov. **19**(2), 198–9 (Sep. 1973); CPM-7309D0246

—Emergence of normal modes propagating in a wedge on a half–space from the former into the latter —V. K. Kuznetsov. **19** (3), 241–5 (Nov. 1973); CPM-7312F0305

Kvasova, L. E.—Ultra– and hypersonic properties of octyl and nonyl alcohols —L. E. Kvasova, L. Pulatova, L. A. Rasulmukhamedova and P. K. Khabibullaev. **19**(5), 445–6 (Mar. 1974); CPM-7403D0321

L

Lagunov, A. S.—Effect of a transverse magnetic field on acoustic relaxation in nematic liquid crystals —A. V. Belousov, A. P. Kapustin and A. S. Lagunov. **19**(6), 579 (May 1974); CPM-7405F0787

Laidabon, Ch. S.—Experimental Study of Vibrational Relaxation in a CO_2–CH_4 Gas Mixture —Ch. S. Laidabon and V. F. Yakovlev. **19** (1), 76–7 (Jul. 1973); CPM-7307E0664

Lapin, A. D.—Stability of fluid flow confined by elastic walls —A. D. Lapin. **19**(4), 356–8 (Jan. 1974); CPM-7401D0436

—Sound radiation by volume–velocity sources in a waveguide with supersonic motion of the internal medium —A. D. Lapin. **19**(6), 546–9 (May 1974); CPM-7405F0754

Leikin, I. A.—Amplitude Characteristics of Sound Signals Scattered by Water Waves —V. I. Zel'dis, I. A. Leikin, A. D. Rozenberg and V. G. Ruskevich. **19**(2), 118–22 (Sep. 1973); CPM-7309D0166

Leiko, A. G.—Scattered field of an array of acoustically compliant elliptical cylinders —A. G. Leiko and V. I. Mayatskii. **19**(3), 246–9 (Nov. 1973); CPM-7312F0310

—Directivity of a group of point receivers in the presence of an array of parallel elliptical cylinders —A. G. Leiko and V. I. Mayatskii. **19**(3), 295–6 (Nov. 1973); CPM-7312F0359

Levkovskii, Yu. L.—Statistical Characteristics of Bubble Cavitation —Yu. L. Levkovskii. **19**(2), 135–8 (Sep. 1973); CPM-7309D0183

Lobanov, A. M.—Experimental study of the diffraction corrections to the velocity of ultrasound in liquids —K. M. Burundukov and A. M. Lobanov. **19**(5), 493–4 (Mar. 1974); CPM-7403D0369

Lukashova, N. V.—Stimulated scattering of sound at the surface of a liquid —V. K. Gavrikov and N. V. Lukashova. **19**(4), 328–31 (Jan. 1974); CPM-7401D0408

Lyamov, V. E.—Nonlinear interaction of elastic waves in crystals and signal data processing —V. A. Krasil'nikov and V. E. Lyamov. **19** (5), 516–8 (Mar. 1974); CPM-7403D0392

Lyamshev, L. M.—A possible means of elastic wave amplification by reflection from the free boundaries of piezoelectric insulator crystals —L. M. Lyamshev and N. S. Shevyakhov. **19**(6), 592–3 (May 1974); CPM-7405F0800

Lysanov, Yu. P.—Spatial Correlation of Sound Signals Reflected from the Ocean Bottom —V. I. Volovov, Yu. P. Lysanov and V. A. Sechkin. **19**(1), 11–3 (Jul. 1973); CPM-7307E0599

—Correlation of sound signals reflected from the ocean bottom with variation of the transmission frequency —V. I. Volovov, V. V. Krasnoborod'ko and Yu. P. Lysanov. **19**(3), 216–20 (Nov. 1973); CPM-7312F0280

—Scattering of low–frequency sound by ocean surface waves —Yu. P. Lysanov. **19**(4), 359–61 (Jan. 1974); CPM-7401D0439

—Method of determining the scattering diagrams for statistically uneven surfaces —Yu. P. Lysanov. **19**(4), 401–2 (Jan. 1974); CPM-7401D0481

M

Makhkamov, S.—Vibrational Relaxation Mechanism in Liquids —L. A. Davidovich, A. A. Ivanov, S. Makhkamov, L. Pulatova, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(1), 18–21 (Jul. 1973); CPM-7307E0606

—Acoustical properties of acetic acid–pyridine solutions —A. A. Ivanov, S. Makhkamov, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(6), 588–9 (May 1974); CPM-7405F0796

Mamin, V. M.—Sound propagation in variable–section ducts carrying a compressible gas flow —V. I. Kondrat'ev, V. M. Mamin and L. S. Pykhov. **19**(6), 542–5 (May 1974); CPM-7405F0750

Manych, A. P.—Formation of ionizing–particle tracks in an ultrasonic field in a liquid–hydrogen bubble chamber —V. A. Akulichev, V. G. Grebinnik, V. A. Zhukov, V. A. Krasil'nikov, A. P. Manych and G. I. Selivanov. **19**(4), 312–7 (Jan. 1974); CPM-7401D0392

Margolin, V. S.—Mechanical load impedance in the ultrasonic cutting of brittle materials —L. I. Ganeva, I. P. Golyamina and V. S. Margolin. **19**(4), 335–8 (Jan. 1974); CPM-7401D0415

Maslennikov, S. I.—Laser sololuminescence in a liquid —A. G. Akmanov, V. G. Ben'kovskii, P. I. Golubnichii, S. I. Maslennikov and V. G. Shemanin. **19**(5), 417–8 (Mar. 1974); CPM-7403D0293

Masterov, E. P.—Results of an Experimental Study of the Energy Spectral Characteristics of Sea Noise —E. P. Masterov and S. P. Shorokhova. **19**(2), 139–41 (Sep. 1973); CPM-7309D0187

Matveev, A. K.—Directivity characteristics of a point source situated at the vertex of a divergent channel in a fresh–water reservoir —L. N. Zakharov, V. A. Kirshov, A. K. Matveev and V. V. Naumova. **19**(6), 586–7 (May 1974); CPM-7405F0794

Mayatskii, V. I.—Scattered field of an array of acoustically compliant elliptical cylinders —A. G. Leiko and V. I. Mayatskii. **19**(3), 246–9 (Nov. 1973); CPM-7312F0310

—Directivity of a group of point receivers in the presence of an array of parallel elliptical cylinders —A. G. Leiko and V. I. Mayatskii. **19**(3), 295–6 (Nov. 1973); CPM-7312F0359

Melent'ev, P. V.—Use of a quarter–wave vibrator to measure the dynamic characteristics of polymers in the audio–frequency range —Yu. V. Zelenev, P. V. Melent'ev and L. M. Élektrova. **19**(5), 497–8 (Mar. 1974); CPM-7403D0373

Mel'nikov, B. N.—Calculation of Noise–Optimum Climb–Out Paths for Airliners —B. N. Mel'nikov, A. M. Mkhitaryan, V. I. Tokarev and I. P. Shmakov. **19**(2), 191–2 (Sep. 1973); CPM-7309D0239

Merkulov, L. G.—Operation of a Piezoelectric Transducer into an Elastically Anisotropic Solid Medium —L. G. Merkulov, V. A. Fedorov and L. A. Yakovlev. **19**(1), 36–40 (Jul. 1973); CPM-7307E0624

Merkulova, V. M.—Variation of the attenuation of ultrasound in rocks after heating —V. M. Merkulova. **19**(6), 594–5 (May 1974); CPM-7405F0802

Mikhailenko, S. A.—Excess ultrasonic absorption in classical monatomic liquids —Yu. P. Blagoi, B. G. Dudar' and S. A. Mikhailenko. **19**(3), 284–5 (Nov. 1973); CPM-7312F0348

Mikhailov, I. G.—Ultrasonic Absorption in the t–Butyl Alcohol–Water System —P. Kruus, L. K. Kudryashova, I. G. Mikhailov and V. P. Romanov. **19**(1), 82–3 (Jul. 1973); CPM-7307E0670

—Influence of Pressure and Temperature on the Absorption of Ultrasound in a 3% Solution of Polyisobutylene in Transformer Oil —I. G. Mikhailov and V. M. Polunin. **19**(2), 142–4 (Sep. 1973); CPM-7309D0190

—Influence of the wettability of an ultrasonically radiating surface on the breakoff of cavitation bubbles —I. G. Mikhailov and V. M. Polunin. **19**(3), 297 (Nov. 1973); CPM-7312F0361

—Attenuation of ultrasound in emulsions —I. S. Kol'tsova, I. G. Mikhailov and B. Saburov. **19**(5), 455–8 (Mar. 1974); CPM-7403D0331

Mitin, M. B.—Experimental study of the dispersion of sound waves in carbon dixoide gas up to 5.10^4 MHz/atm —M. B. Mitin and V. F. Yakovlev. **19**(5), 499 (Mar. 1974); CPM-7403D0375

Mkhitarov, R. A.—Sound radiation from a rectangular plate vibrating under the action of pressure fluctuations in a turbulent boundary layer —R. A. Mkhitarov. **19**(4), 367–71 (Jan. 1974); CPM-7401D0447

Mkhitaryan, A. M.—Calculation of Noise–Optimum Climb–Out Paths for Airliners —B. N. Mel'nikov, A. M. Mkhitaryan, V. I. Tokarev and I. P. Shmakov. **19**(2), 191–2 (Sep. 1973); CPM-7309D0239

Morozov, V. P.—Theoretical analysis of the acoustic emission from cavitation line vortices —V. P. Morozov. **19**(5), 468–71 (Mar. 1974); CPM-7403D0344

Mushnikov, V. N.—Experimental testing of the band hypothesis of vowel perception —V. N. Mushnikov and L. A. Chistovich. **19**(3), 250–4 (Nov. 1973); CPM-7312F0314

—Phoneme boundary fluctuations —V. N. Mushnikov and L. A. Chistovich. **19**(4), 362–6 (Jan. 1974); CPM-7401D0442

N

Nasonov, V. S.—Yttrium Iron Garnet Acoustic Resonators —V. S. Nasonov and T. P. Telegina. **19**(1), 78–9 (Jul. 1973); CPM-7307E0666

Naugol'nykh, K. A.—Collapse of a Bubble in a Compressible Liquid —I. B. Esipov and K. A. Naugol'nykh. **19**(2), 187–8 (Sep. 1973); CPM-7309D0235

Naumova, V. V.—Directivity characteristics of a point source situated at the vertex of a divergent channel in a fresh–water reservoir —L. N. Zakharov, V. A. Kirshov, A. K. Matveev and V. V. Naumova. **19**(6), 586–7 (May 1974); CPM-7405F0794

Neklyudov, V. I.—Spatial and frequency correlation of the amplitude fluctuations of sound signals reflected from the ocean surface —V. I. Neklyudov and S. D. Chuprov. **19**(3), 255–9 (Nov. 1973); CPM-7312F0319

Nemtsov, V. B.—Sound Propagation in Asymmetrical Liquids —V. B. Nemtsov. **19**(1), 80–1 (Jul. 1973); CPM-7307E0668

Nevskii, Yu. E.—Possibility of lowering the natural frequency of cadmium sulfide diffusion transducers —Yu. E. Nevskii and L. V. Selivanov. **19**(6), 596 (May 1974); CPM-7405F0804

Nikiforov, A. S.—Flexural Wave Fields in Infinite Beam–Reinforced Plates under Point Excitation —S. I. Kovinskaya and A. S. Nikiforov. **19**(1), 32–5 (Jul. 1973); CPM-7307E0620

—Electrical Modeling of the Sound Field of an Array of Incoherent Sources —A. S. Nikiforov. **19**(1), 84–5 (Jul. 1973); CPM-7307E0672

—Effectiveness of the damping of reinforcing beams in engineering structures —A. S. Nikiforov. **19**(3), 260–1 (Nov. 1973); CPM-7312F0324

—Excitation of an infinite plate by a transverse force distributed uniformly around a circle —A. S. Nikiforov. **19**(4), 372–4 (Jan. 1974); CPM-7401D0452

Nozdrev, V. F.—Velocity and absorption of ultrasound in some halogen derivatives of methane —V. F. Nozdrev and V. A. Redkozubov. **19**(4), 403–4 (Jan. 1974); CPM-7401D0483

—Acoustical parameters of sulfur hexafluoride in the critical region —B. A. Belinskii, V. F. Nozdrev and T. Nuriddinov. **19**(6), 577–8 (May 1974); CPM-7405F0785

Nuriddinov, T.—Acoustical parameters of sulfur hexafluoride in the critical region —B. A. Belinskii, V. F. Nozdrev and T. Nuriddinov. **19**(6), 577–8 (May 1974); CPM-7405F0785

O

Ol'shevskii, V. V.—Characteristics of the Correlative and Square–Law Detection of Echo Signals in Sonar Systems for the Location of Biological Targets —V. V. Ol'shevskii. **19**(1), 41–4 (Jul. 1973); CPM-7307E0629

Ostroumov, G. A.—Application of Ultrasound for the Evacuation of Vacuum Electronic Equipment —G. A. Ostroumov and G. A. Fedotov. **19**(1), 51–3 (Jul. 1973); CPM-7307E0639

Ostrovskii, L. A.—Nonlinear Mode Interaction and Parametric Amplification in Acoustic Waveguides —L. A. Ostrovskii and I. A. Papilova. **19**(1), 45–50 (Jul. 1973); CPM-7307E0633

P

Papilova, I. A.—Nonlinear Mode Interaction and Parametric Amplification in Acoustic Waveguides —L. A. Ostrovskii and I. A. Papilova. **19**(1), 45–50 (Jul. 1973); CPM-7307E0633

Pen'kov, S. N.—Relaxation properties of dilute solutions of polymers with chain molecules having different thermodynamic rigidities —V. P. Budtov, Yu. L. Vagin and S. N. Pen'kov. **19**(6), 519–22 (May 1974); CPM-7405F0727

Perepechko, I. I.—Velocity of ultrasound and molecular motion in polymethylmethacrylate in the temperature interval 2.1–240°K —P. D. Golub and I. I. Perepechko. **19**(4), 391–2 (Jan. 1974); CPM-7401D0471

Petlenko, B. I.—Structural variations of speech produced in a helium–oxygen medium —L. S. Butyrskii and B. I. Petlenko. **19**(5), 419–24 (Mar. 1974); CPM-7403D0295

Petrovskii, V. S.—Averaging of turbulent pressure fluctuations by a distributed–sensitivity sound receiver —V. S. Petrovskii. **19**(3), 262–5 (Nov. 1973); CPM-7312F0326

—Array of plane transducers as a spatial–frequency filter for turbulent pressure fluctuations —V. S. Petrovskii. **19**(5), 472–7 (Mar. 1974); CPM-7403D0348

Piotukh, V. B.—Experimental study of the structure of longitudinal modes in rods and acoustic resonance detection —L. K. Zarembo, V. B. Piotukh and S. S. Sekoyan. **19**(5), 495–6 (Mar. 1974); CPM-7403D0371

Pirogov, V. A.—Matching layers for electroacoustic receiving transducers —V. A. Pirogov, E. S. Reizin and B. D. Tartakovskii. **19**(5), 478–81 (Mar. 1974); CPM-7403D0354

Plakhov, D. D.—Sound Radiation from a Point–Driven Infinite Elastic Cylinder —D. D. Plakhov. **19**(1), 54–9 (Jul. 1973); CPM-7307E0642

—Sound diffraction by a baffle coupled with an elastic plate —A. N. Korovkin and D. D. Plakhov. **19**(5), 459–62 (Mar. 1974); CPM-7403D0335

Polunin, V. M.—Influence of Pressure and Temperature on the Absorption of Ultrasound in a 3% Solution of Polyisobutylene in Transformer Oil —I. G. Mikhailov and V. M. Polunin. **19**(2), 142–4 (Sep. 1973); CPM-7309D0190

—Influence of the wettability of an ultrasonically radiating surface on the breakoff of cavitation bubbles —I. G. Mikhailov and V. M. Polunin. **19**(3), 297 (Nov. 1973); CPM-7312F0361

Polyakov, Z. I.—Choosing the Optimum Dimensions of Concentrators for Low–Power Ultrasonic Machine Tools —D. L. Blyumenkrants and Z. I. Polyakov. **19**(1), 6–10 (Jul. 1973); CPM-7307E0594

Popov, A. V.—Transverse diffusion method in the problem of sound diffraction by a strip —A. V. Popov. **19**(4), 375–8 (Jan. 1974); CPM-7401D0455

Popov, R. Yu.—Model estimation of the longitudinal correlation of a blast signal propagating in the ocean —R. Yu. Popov and Yu. I. Tuzhilkin. **19**(3), 266–70 (Nov. 1973); CPM-7312F0330

Popova, L. A.—Stimulation of human peripheral neural structures by focused ultrasound —L. R. Gavrilov, G. V. Gershuni, O. B. Il'inskii, L. A. Popova, M. G. Sirotyuk and E. M. Tsirul'nikov. **19** (4), 332–4 (Jan. 1974); CPM-7401D0412

Prudnikov, A. S.—Resonance properties of certain types of inhomogeneous acoustic waveguides —A. V. Egor'ichev, A. S. Prudnikov and K. V. Chernyshev. **19**(3), 230–3 (Nov. 1973); CPM-7312F0294

Pugach, V. P.—Synthesis of a spherical array with specified conditions on part of its surface —V. P. Pugach. **19**(5), 500–2 (Mar. 1974); CPM-7403D0376

Pulatova, L.—Vibrational Relaxation Mechanism in Liquids —L. A. Davidovich, A. A. Ivanov, S. Makhkamov, L. Pulatova, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(1), 18–21 (Jul. 1973); CPM-7307E0606

—Ultra– and hypersonic properties of octyl and nonyl alcohols —L. E. Kvasova, L. Pulatova, L. A. Rasulmukhamedova and P. K. Khabibullaev. **19**(5), 445–6 (Mar. 1974); CPM-7403D0321

Pykhov, L. S.—Sound propagation in variable–section ducts carrying a compressible gas flow —V. I. Kondrat'ev, V. M. Mamin and L. S. Pykhov. **19**(6), 542–5 (May 1974); CPM-7405F0750

R

Rasulmukhamedova, L. A.—Ultra– and hypersonic properties of octyl and nonyl alcohols —L. E. Kvasova, L. Pulatova, L. A. Rasulmukhamedova and P. K. Khabibullaev. **19**(5), 445–6 (Mar. 1974); CPM-7403D0321

Redkozubov, V. A.—Velocity and absorption of ultrasound in some halogen derivatives of methane —V. F. Nozdrev and V. A. Redkozubov. **19**(4), 403–4 (Jan. 1974); CPM-7401D0483

Reizin, E. S.—Matching layers for electroacoustic receiving transducers —V. A. Pirogov, E. S. Reizin and B. D. Tartakovskii. **19**(5), 478–81 (Mar. 1974); CPM-7403D0354

Rekhtman, V. I.—Low–Frequency Hydropneumatic Acoustic Generator —V. I. Zhulin, A. V. Rimskii–Korsakov, V. I. Rekhtman and V. S. Yamshchikov. **19**(1), 22–7 (Jul. 1973); CPM-7307E0610

Rimskii–Korsakov, A. V.—Low–Frequency Hydropneumatic Acoustic Generator —V. I. Zhulin, A. V. Rimskii–Korsakov, V. I. Rekhtman and V. S. Yamshchikov. **19**(1), 22–7 (Jul. 1973); CPM-7307E0610

Romanov, V. N.—Sound Radiation from a Plate T Junction Driven by a Point Force —V. N. Romanov. **19**(2), 145–7 (Sep. 1973); CPM-7309D0193

—Sound radiation from a flexurally vibrating plate with a semiinfinite impedance obstruction —V. N. Romanov. **19**(5), 482–5 (Mar. 1974); CPM-7403D0358

Romanov, V. P.—Ultrasonic Absorption in the t–Butyl Alcohol–Water System —P. Kruus, L. K. Kudryashova, I. G. Mikhailov and V. P. Romanov. **19**(1), 82–3 (Jul. 1973); CPM-7307E0670

—The Quasichemical and Fluctuation Mechanisms of Relaxation in Mixtures —O. P. Krichevskaya, V. P. Romanov and V. A. Solov'ev. **19**(2), 126–9 (Sep. 1973); CPM-7309D0174

—Anomaly of the temperature dependence of the sound velocity in glasses —M. N. Kul'bitskaya, V. P. Romanov and V. A. Shutilov. **19**(4), 399–400 (Jan. 1974); CPM-7401D0479

—Relaxation of the ion atmospheres and sound absorption in electrolytes —V. P. Romanov and V. A. Solov'ev. **19**(6), 550–5 (May 1974); CPM-7405F0758

Rosin, G. S.—Oscillations Induced in Porous Materials with an Elastic Matrix by Sound Waves at Normal Incidence —G. S. Rosin. **19**(1), 60–4 (Jul. 1973); CPM-7307E0648

—Dynamic Properties of Rubber —D. B. Vashchuk and G. S. Rosin. **19**(2), 101–2 (Sep. 1973); CPM-7309D0149

Rozenberg, A. D.—Amplitude Characteristics of Sound Signals Scattered by Water Waves —V. I. Zel'dis, I. A. Leikin, A. D. Rozenberg and V. G. Ruskevich. **19**(2), 118–22 (Sep. 1973); CPM-7309D0166

Rozenfel'd, É. I.—Acoustic streaming as one of the factors responsible for the influence of sound on a laminar flame jet —Yu. Ya. Borisov, A. F. Kiyan and É. I. Rozenfel'd. **19**(6), 580–1 (May 1974); CPM-7405F0788

Rubanov, L. A.—Piezoelectric elements made from antimony sulfoiodide crystals —A. A. Grekov, S. P. Danilova, P. L. Zaks, V. V. Kulieva, L. A. Rubanov, L. N. Syrkin, N. P. Chekhunova and A. M. Él'gard. **19**(4), 393–4 (Jan. 1974); CPM-7401D0473

Rudenko, O. V.—Confinement of a quasiplane beam of periodic perturbations in a nonlinear medium —O. V. Rudenko, S. I. Soluyan and R. V. Khokhlov. **19**(6), 556–9 (May 1974); CPM-7405F0764

Ruskevich, V. G.—Amplitude Characteristics of Sound Signals Scattered by Water Waves —V. I. Zel'dis, I. A. Leikin, A. D. Rozenberg and V. G. Ruskevich. **19**(2), 118–22 (Sep. 1973); CPM-7309D0166

Rybak, S. A.—Vibrations of Double–Curvature Shells —S. A. Rybak. **19**(2), 148–53 (Sep. 1973); CPM-7309D0196

Ryzhkova, R. N.—Articulation characteristics of extremally coded speech —N. I. Kozlenko and R. N. Ryzhkova. **19**(3), 238–40 (Nov. 1973); CPM-7312F0302

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Saburov, B.—Attenuation of ultrasound in emulsions —I. S. Kol'tsova, I. G. Mikhailov and B. Saburov. **19**(5), 455–8 (Mar. 1974); CPM-7403D0331

Savel'ev, A. Ya.—Konstantinov Effect in Certain Acoustical Problems —A. Ya. Savel'ev. **19**(2), 154–8 (Sep. 1973); CPM-7309D0202

Sechkin, V. A.—Spatial Correlation of Sound Signals Reflected from the Ocean Bottom —V. I. Volovov, Yu. P. Lysanov and V. A. Sechkin. **19**(1), 11–3 (Jul. 1973); CPM-7307E0599

Sekoyan, S. S.—Experimental study of the structure of longitudinal modes in rods and acoustic resonance detection —L. K. Zarembo, V. B. Piotukh and S. S. Sekoyan. **19**(5), 495–6 (Mar. 1974); CPM-7403D0371

Selivanov, G. I.—Formation of ionizing–particle tracks in an ultrasonic field in a liquid–hydrogen bubble chamber —V. A. Akulichev, V. G. Grebinnik, V. A. Zhukov, V. A. Krasil'nikov, A. P. Manych and G. I. Selivanov. **19**(4), 312–7 (Jan. 1974); CPM-7401D0392

Selivanov, L. V.—Possibility of lowering the natural frequency of cadmium sulfide diffusion transducers —Yu. E. Nevskii and L. V. Selivanov. **19**(6), 596 (May 1974); CPM-7405F0804

Semenov, V. I.—Elastic and photoelastic properties of proustite —A. A. Godovikov, I. I. Zubrinov, V. I. Semenov and D. V. Sheloput. **19**(6), 582–3 (May 1974); CPM-7405F0790

Shaevich, T. A.—Influence of external factors on the electrophysical properties of piezoelectric ceramics made from solid solutions of lead barium niobate —A. A. Anan'eva, M. A. Ugryumova and T. A. Shaevich. **19**(4), 318–9 (Jan. 1974); CPM-7401D0398

Shakhparonov, M. I.—Acoustic relaxation in tertiary butyl alcohol and binary solutions of tertiary butyl alcohol and ethylene glycol —L. B. Verblyan, V. S. Sperkach and M. I. Shakhparonov. **19**(3), 288–9 (Nov. 1973); CPM-7312F0352

—Acoustic relaxation in the binary system normal butanol–ternary butanol —V. S. Sperkach, P. K. Khabibullaev and M. I. Shakhparonov. **19**(4), 405–6 (Jan. 1974); CPM-7401D0485

Sharipov, Sh.—Vibrational Relaxation Mechanism in Liquids —L. A. Davidovich, A. A. Ivanov, S. Makhkamov, L. Pulatova, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(1), 18–21 (Jul. 1973); CPM-7307E0606

—Acoustical properties of acetic acid–pyridine solutions —A. A. Ivanov, S. Makhkamov, P. K. Khabibullaev, M. G. Khaliulin and Sh. Sharipov. **19**(6), 588–9 (May 1974); CPM-7405F0796

Shchekin, I. E.—Numerical and analytical calculation of bubble coagulation in a sound field —I. E. Shchekin. **19**(4), 383–6 (Jan. 1974); CPM-7401D0463

—Effect of viscosity on the dynamics of a collapsing bubble executing translational motion —G. N. Kuznetsov and I. E. Shchekin. **19**(5), 463–7 (Mar. 1974); CPM-7403D0339

Shchirzhetskii, Kh. A.—Characteristics of Acoustic Pulses Emitted by Certain Blast-Type Effects —Kh. A. Shchirzhetskii. **19**(2), 193–5 (Sep. 1973); CPM-7309D0241

Sheloput, D. V.—Elastic and photoelastic properties of proustite —A. A. Godovikov, I. I. Zubrinov, V. I. Semenov and D. V. Sheloput. **19**(6), 582–3 (May 1974); CPM-7405F0790

Shemanin, V. G.—Laser sololuminescence in a liquid —A. G. Akmanov, V. G. Ben'kovskii, P. I. Golubnichii, S. I. Maslennikov and V. G. Shemanin. **19**(5), 417–8 (Mar. 1974); CPM-7403D0293

Shenderov, E. L.—Erratum: Formation of Caustics in the Interaction of Sound with Shells [**18**, 381 (1973,3)] —E. I. Kheifets and E. L. Shenderov. **19**(1), 91 (Jul. 1973); CPM-7307E0679

—Quantitative Analysis of Sound Fields Visualized by the Shadow–Optical Method —E. P. Smirnov, E. I. Kheifets and E. L. Shenderov. **19**(2), 159–64 (Sep. 1973); CPM-7309D0207

Shestakov, V. D.—Influence of Ultrasound on the Dynamics of a Vapor Bubble in Liquid Hydrogen —L. G. Tkachev and V. D. Shestakov. **19**(2), 169–72 (Sep. 1973); CPM-7309D0217

Shevyakhov, N. S.—A possible means of elastic wave amplification by reflection from the free boundaries of piezoelectric insulator crystals —L. M. Lyamshev and N. S. Shevyakhov. **19**(6), 592–3 (May 1974); CPM-7405F0800

Shmakov, I. P.—Calculation of Noise–Optimum Climb–Out Paths for Airliners —B. N. Mel'nikov, A. M. Mkhitaryan, V. I. Tokarev and I. P. Shmakov. **19**(2), 191–2 (Sep. 1973); CPM-7309D0239

Shorokhova, S. P.—Results of an Experimental Study of the Energy Spectral Characteristics of Sea Noise —E. P. Masterov and S. P. Shorokhova. **19**(2), 139–41 (Sep. 1973); CPM-7309D0187

Shul'ga, N. A.—Wave Propagation in a Solid Medium Having a Curvilinear Boundary —N. A. Shul'ga and B. M. Shuman. **19**(2), 178–80 (Sep. 1973); CPM-7309D0226

Shuman, B. M.—Wave Propagation in a Solid Medium Having a Curvilinear Boundary —N. A. Shul'ga and B. M. Shuman. **19**(2), 178–80 (Sep. 1973); CPM-7309D0226

Shutilov, V. A.—Anomaly of the temperature dependence of the sound velocity in glasses —M. N. Kul'bitskaya, V. P. Romanov and V. A. Shutilov. **19**(4), 399–400 (Jan. 1974); CPM-7401D0479

Shvidanenko, A. M.—Wave propagation in a viscoelastic layered medium —A. M. Shvidanenko. **19**(5), 506–7 (Mar. 1974); CPM-7403D0382

Siletskii, S. M.—Sound scattering by an elliptical cylinder with mixed boundary conditions —V. A. Andebura and S. M. Siletskii. **19**(6), 573–5 (May 1974); CPM-7405F0781

Sirotyuk, M. G.—Stimulation of human peripheral neural structures by focused ultrasound —L. R. Gavrilov, G. V. Gershuni, O. B. Il'inskii, L. A. Popova, M. G. Sirotyuk and E. M. Tsirul'nikov. **19** (4), 332–4 (Jan. 1974); CPM-7401D0412

Smirnov, A. A.—Longitudinal wave attenuation in textured cadmium sulfide thin films —V. P. Demidov and A. A. Smirnov. **19**(3), 223–5 (Nov. 1973); CPM-7312F0287

Smirnov, E. P.—Quantitative Analysis of Sound Fields Visualized by the Shadow–Optical Method —E. P. Smirnov, E. I. Kheifets and E. L. Shenderov. **19**(2), 159–64 (Sep. 1973); CPM-7309D0207

Smol'yakov, A. V.—Intensity of Sound Radiation from a Turbulent Boundary Layer on a Plate —A. V. Smol'yakov. **19**(2), 165–8 (Sep. 1973); CPM-7309D0213

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Sokolova, R. A.—Spatial correlation functions in the gap between a thin plate and a baffle having a local impedance —V. I. Klyachkin and R. A. Sokolova. **19**(5), 450–4 (Mar. 1974); CPM-7403D0326

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Solov'ev, V. A.—The Quasichemical and Fluctuation Mechanisms of Relaxation in Mixtures —O. P. Krichevskaya, V. P. Romanov and V. A. Solov'ev. **19**(2), 126–9 (Sep. 1973); CPM-7309D0174

—Relaxation of the ion atmospheres and sound absorption in electrolytes —V. P. Romanov and V. A. Solov'ev. **19**(6), 550–5 (May 1974); CPM-7405F0758

Soluyan, S. I.—Nonlinear wave propagation in a liquid containing uniformly distributed air bubbles —E. A. Zabolotskaya and S. I. Soluyan. **19**(5), 442–4 (Mar. 1974); CPM-7403D0318

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Soroka, L. A.—Hydrodynamic modeling of the inner ear —L. A. Soroka. **19**(6), 565–8 (May 1974); CPM-7405F0773

Soroka, V. V.—Theory of light diffraction by sound waves in anisotropic media —V. V. Soroka. **19**(6), 560–4 (May 1974); CPM-7405F0768

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Sorokodum, E. D.—Acoustic streaming and friction forces in the boundary layer of a Chaplygin profile —E. D. Sorokodum. **19**(5), 486–8 (Mar. 1974); CPM-7403D0362

—Acoustic streaming about an elliptical cylinder at large Reynolds numbers —E. D. Sorokodum and V. I. Timoshenko. **19**(6), 597–8 (May 1974); CPM-7405F0805

Sperkach, V. S.—Acoustic relaxation in tertiary butyl alcohol and binary solutions of tertiary butyl alcohol and ethylene glycol —L. B. Verblyan, V. S. Sperkach and M. I. Shakhparonov. **19**(3), 288–9 (Nov. 1973); CPM-7312F0352

—Acoustic relaxation in the binary system normal butanol–ternary butanol —V. S. Sperkach, P. K. Khabibullaev and M. I. Shakhparonov. **19**(4), 405–6 (Jan. 1974); CPM-7401D0485

Stasenko, A. L.—Sound dispersion in a gas mixture containing heat–radiating particles —A. L. Stasenko. **19**(6), 569–72 (May 1974); CPM-7405F0777

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Talashev, A. A.—Visualization of ultrasonic surface waves by means of liquid crystals —O. A. Kapustina and A. A. Talashev. **19**(4), 397–8 (Jan. 1974); CPM-7401D0477

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Telegina, T. P.—Yttrium Iron Garnet Acoustic Resonators —V. S. Nasonov and T. P. Telegina. **19**(1), 78–9 (Jul. 1973); CPM-7307E0666

Timoshenko, V. I.—Choosing the Optimum Conditions for the Acoustic Coagulation of Aerosols —V. A. Belen'kii, V. I. Timoshenko and T. Ya. Fedoruk. **19**(2), 181–2 (Sep. 1973); CPM-7309D0229

—Electroacoustic transformation in a low–temperature plasma —V. I. Timoshenko. **19**(5), 503 (Mar. 1974); CPM-7403D0379

–Calculation of the diffusivity of aerosol particles in a sound field– V. I. Timoshenko. **19**(5), 504–5 (Mar. 1974); CPM-7403D0380

—Acoustic streaming about an elliptical cylinder at large Reynolds numbers —E. D. Sorokodum and V. I. Timoshenko. **19**(6), 597–8 (May 1974); CPM-7405F0805

Tkachev, L. G.—Influence of Ultrasound on the Dynamics of a Vapor Bubble in Liquid Hydrogen —L. G. Tkachev and V. D. Shestakov. **19**(2), 169–72 (Sep. 1973); CPM-7309D0217

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Tsirul'nikov, E. M.—Stimulation of human peripheral neural structures by focused ultrasound —L. R. Gavrilov, G. V. Gershuni, O. B. Il'inskii, L. A. Popova, M. G. Sirotyuk and E. M. Tsirul'nikov. **19**(4), 332–4 (Jan. 1974); CPM-7401D0412

Tunin, M. S.—Rayleigh light scattering and its fine structure in liquid perfluorocyclopentane —M. S. Tunin. **19**(6), 599 (May 1974); CPM-7405F0807

Tuzhilkin, Yu. I.—Model estimation of the longitudinal correlation of a blast signal propagating in the ocean —R. Yu. Popov and Yu. I. Tuzhilkin. **19**(3), 266–70 (Nov. 1973); CPM-7312F0330

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Ugryumova, M. A.—Influence of external factors on the electrophysical properties of piezoelectric ceramics made from solid solutions of lead barium niobate —A. A. Anan'eva, M. A. Ugryumova and T. A. Shaevich. **19**(4), 318–9 (Jan. 1974); CPM-7401D0398

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Volkov, I. I.–Caustics associated with positive refraction in a two-layer medium–I. I. Volkov.19(4), 324–7 (Jan. 1974); CPM-7401D0404

Volovov, V. I.—Spatial Correlation of Sound Signals Reflected from the Ocean Bottom —V. I. Volovov, Yu. P. Lysanov and V. A. Sechkin. **19**(1), 11–3 (Jul. 1973); CPM-7307E0599

—Correlation of sound signals reflected from the ocean bottom with variation of the transmission frequency —V. I. Volovov, V. V. Krasnoborod'ko and Yu. P. Lysanov. **19**(3), 216–20 (Nov. 1973); CPM-7312F0280

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Zakharov, L. N.—Directivity characteristics of a point source situated at the vertex of a divergent channel in a fresh–water reservoir —L. N. Zakharov, V. A. Kirshov, A. K. Matveev and V. V. Naumova. **19**(6), 586–7 (May 1974); CPM-7405F0794

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